

LISTING OF CLAIMS AFTER *RESPONSE A***Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (1ST Amended per A) A computer-implemented method for dynamic emulation of legacy instructions of a legacy program comprising:

providing state information for determining a program execution mode for emulating said

legacy instructions,

accessing said legacy instructions and said state information,

for each particular legacy instruction,

querying to determine if one or more particular translated instructions for said

execution mode are stored as a result of translating said legacy instruction for

said execution mode, and

if not translated for said execution mode,

translating the particular legacy instruction into one or more

particular translated instructions for emulating the

particular legacy instruction for said execution mode,

storing said one or more particular translated instructions

with said state information, and

if translated for said execution mode, continuing without additional

translating,

accessing said one or more particular translated instructions for emulating said

legacy instructions for said execution mode;

executing said translated instructions to emulate said legacy instructions.

2. (ORIGINAL) The method of Claim 1 wherein said storing of the one or more particular translated instructions is in one or more particular translated blocks and said state information is stored in each of said particular translated blocks.

LISTING OF CLAIMS AFTER *RESPONSE A*

- 1 3. (ORIGINAL) The method of Claim 1 wherein said legacy instructions are for a legacy system
2 having a S/390 architecture.
- 1 4. (ORIGINAL) The method of Claim 1 wherein said legacy instructions are object code
2 instructions compiled/assembled for a legacy architecture.
- 1 5. (ORIGINAL) The method of Claim 1 wherein said translated instructions are for execution in
2 a RISC architecture.

LISTING OF CLAIMS AFTER *RESPONSE A*

1 6. (1ST Amended per A) A computer-implemented method for dynamic emulation of legacy
2 instructions, where the legacy instructions are compiled/assembled into object code form for a native
3 architecture, where the legacy instructions are executed as guests in the host architecture, where the
4 legacy instructions are translated to translated instructions in the host architecture and the translated
5 instructions are executed in the host architecture concurrently with the translation of the legacy
6 instructions in the host architecture, comprising:

7 providing state information for determining a program execution mode for emulating said
8 legacy instructions,

9 accessing said legacy instructions and said state information as guests in the host architecture,
10 for each particular legacy instruction,

11 querying to determine if one or more particular translated instructions for said
12 execution mode are stored as a result of translating said legacy instruction for
13 said execution mode, and

14 if not translated for said execution mode,

15 translating the particular legacy instruction into one or more
16 particular translated instructions for emulating the
17 particular legacy instruction for said execution mode,
18 storing said one or more particular translated instructions
19 with said state information, and

20 if translated for said execution mode, continuing without additional
21 translating,

22 accessing said one or more particular translated instructions for emulating said
23 legacy instructions for said execution mode as a guest in said host
24 architecture;

25 executing said translated instructions to emulate said legacy instructions.
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